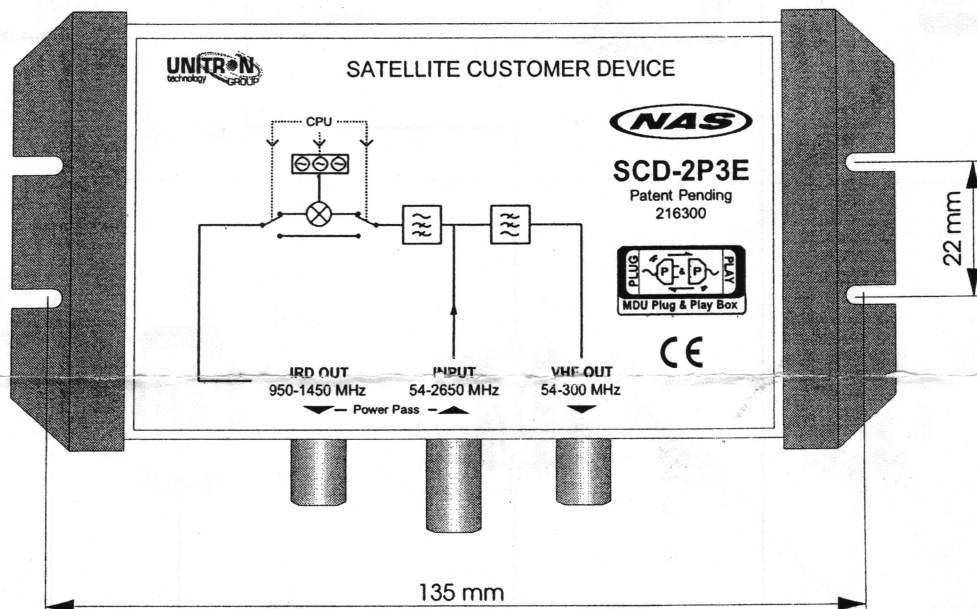


Satellite Customer Device

Item # 216300

SCD-2P3E

Patent Pending



Technical Specifications

Outputs	1 x IRD and 1 x VHF
Input Frequency	54 - 2650 MHz
Output frequency	
* Sat A, converted	977 - 1438 MHz (18V, LHCP)
* Sat A, non converted	962 - 1423 MHz (13V, RHCP)
* Sat B, converted	962 - 1423 MHz (13V, RHCP)
* Sat B, converted	977 - 1438 MHz (18V, LHCP)
* VHF	54 - 300 MHz
PLL Local Oscillator Frequency @ 20°C	
* 1st LO	2972 MHz ± 0.3 MHz
* 2nd LO	1824 MHz ± 0.3 MHz
* 3rd LO	3600 MHz ± 0.3 MHz
Insertion Loss / Gain	
* VHF	< -3 dB
* Converted	+2 dB ± 2 dB (LO 1824 MHz)
	+2 dB ± 2 dB (LO 2972 MHz)
	0 dB ± 2 dB (LO 3600 MHz)
* Non Converted	-3 dB ± 1 dB
Flatness	± 0.5 dB Max. @ 24 MHz
Input Level	
* VHF	Not applicable
* Satellite	-65 dBm Min., -31 dBm Max.

LO Frequency Temperature Drift	<1 kHz / °C
Phase Noise	-50 dBc @ 1 kHz
	-75 dBc @ 10 kHz
	-85 dBc @ 100 kHz
LO leakage on IRD connector	<-60 dBm
Spurious output (out of band)	-50 dBm Max.
Input Return Loss	> 8.0 dB, Typ. 10.0 dB
Output Return Loss	> 8.0 dB, Typ. 10.0 dB
isolation	
* Same satellite, different polarities	25 dB Min., 30 dB Nom.
* Between different satellites	25 dB Min., 30 dB Nom.
* Satellite to VHF output	25 dB Min.
Polarization Control Voltage from IRD (by Echostar Control Word)	
* Sat A LHCP selection	16.0 to 21.0 V
* SAT A RHCP selection	11.8 to 14.0 V
* SAT B LHCP selection	16.0 to 21.0 V
* SAT B RHCP selection	11.8 to 14.0 V
Power required	12 - 20 VDC
Power consumption	100 mA
Environmental requirement	Indoor use
Connectors	
* INPUT	"F" High Quality, conical seize
* IRD OUT and VHF OUT	"F" standard
Dimensions	146 mm x 87 mm x 25 mm

